IN THE CLAIMS:

Rewrite the pending claims as follows:

1-6. (Cancelled).

7. (Previously presented) A method for determining a floating ambiguity value corresponding to a carrier-phase measurement obtained by a user of a satellite positioning system based on signals received from one of a plurality of satellites, the method comprising:

determining a position of the user;

computing a theoretical range from the user to the satellite based on the position of the user;

computing an initial ambiguity value based on the theoretical range and the carrier-phase measurement; and

determining the floating ambiguity value using the initial ambiguity value,

wherein determining the floating ambiguity value includes adjusting a carrier-phase measurement at each of a series of measurement epochs using the initial ambiguity value, the floating ambiguity value is computed using the adjusted carrier-phase measurements, and wherein the floating ambiguity value is computed by taking an expanding average including a plurality of offsets between the adjusted carrier-phase measurement and a corresponding code measurement at each of the series of measurement epochs.

8. (Cancelled).

9. (Previously presented) The method of claim 7 wherein the floating ambiguity value is computed by treating the floating ambiguity value as if a large number of offset values were used in computing it.

10. (Previously presented) The method of claim 7, wherein the carrier-phase measurements and the code measurements are refraction-corrected.

11. (Original) The method of claim 7 wherein the floating ambiguity value is determined as an ambiguity state in a Kalman filter process, and wherein the floating ambiguity value is computed by setting a variance of the ambiguity state to a small value.

12. (Currently amended) A method for positioning or navigating an object associated with both a local reference receiver and a wide-area differential satellite positioning system, comprising:

determining a first position of the object based only on information received from the local reference receiver;

determining floating ambiguity values associated with carrier-phase measurements obtained at the object using the first position of the object; and

determining a second position of the object based on information received from the wide-area differential satellite positioning system and the floating ambiguity values.

13. (Previously presented) The method of claim 12, wherein the first position is relative to the local reference station and the second position is an absolute position, the method further comprising:

receiving a position of the local reference station from the wide-area differential satellite positioning system;

transforming the first position to an absolute position using the position of the local reference receiver before determining the floating ambiguity values; and

transforming the second position to a position relative to the local reference receiver using the position of the local reference station.

14. (Original) The method of claim 12 wherein determining the floating ambiguity values comprises computing initial floating ambiguity values using the first position.

15. (Original) The method of claim 14 wherein computing initial floating ambiguity values comprises computing theoretical ranges between the object and a plurality of satellites.

16. (Original) The method of claim 14 wherein determining the floating ambiguity values comprises adjusting the carrier-phase measurements with the initial floating ambiguity values.

17. (Original) The method of claim 15 wherein determining the floating ambiguity values comprises smoothing code measurements with the adjusted carrier-phase measurements.

18. (Cancelled).

19. (Cancelled).

20. (Cancelled).

21. (Currently amended) A computer readable medium storing therein computer readable program instructions that, when executed by a processor, cause the process to perform a method for positioning or navigating an object associated with both a local reference receiver and a wide-area differential satellite positioning system, the program instructions comprising:

instructions for determining a first position of the object based only on information received from the local reference receiver;

instructions for determining floating ambiguity values associated with carrier-phase measurements obtained at the object using the first position of the object; and

instructions for determining a second position of the object based on information received from the wide-area differential satellite positioning system and the floating ambiguity values.

22. (Previously presented) The computer readable medium of claim 21, wherein the floating ambiguity values comprise integers.

23. (Currently amended) A satellite navigation receiver configured to operate in two or more modes of operation, wherein in a first mode of operation the satellite navigation receiver determines a first floating ambiguity value in accordance with information received from a local reference receiver, the first floating ambiguity value being used to convert a carrier-phase measurement into a range measurement with an accuracy of at least ~~less than~~ a first pre-determined value, and wherein in a second mode of operation the satellite navigation receiver determines a second floating ambiguity value in accordance with information received from a wide-area differential satellite-positioning system, the second floating ambiguity value being used to convert the carrier-phase measurement into the range measurement with the accuracy of at least ~~less than~~ the first pre-determined value.

24. (Previously presented) The satellite navigation receiver of claim 23, wherein a known position of the satellite navigation receiver is used to initialize at least one value selected from the group consisting of the first floating ambiguity value and the second floating ambiguity value.

25. (Previously presented) The satellite navigation receiver of claim 23, wherein a known position of the satellite navigation receiver input by a user is used to initialize at least one value selected from the group consisting of the first floating ambiguity value and the second floating ambiguity value.

26. (Previously presented) The satellite navigation receiver of claim 23, wherein the first mode of operation is used if communication with the local reference receiver is available.

27. (Previously presented) The satellite navigation receiver of claim 23, wherein the first mode of operation is used if a distance from the local reference receiver is less than a second pre-determined value.

28. (Previously presented) The satellite navigation receiver of claim 23, wherein the first floating point ambiguity value is determined in the first mode of operation, the second floating point ambiguity value is determined in the second mode of operation, and wherein the second floating point ambiguity value is initialized to agree with the first floating point ambiguity value at least once during a pre-determined time period.

29. (Previously presented) The satellite navigation receiver of claim 28, wherein initialization of the second floating point ambiguity value at least once during the pre-determined time period reduces a settling time in the second mode of operation to less than a second pre-determined value.

30. (Previously presented) The satellite navigation receiver of claim 28, wherein the second mode of operation is used if communication with the local reference receiver is lost.

31. (Previously presented) The satellite navigation receiver of claim 23, wherein a previously determined position of the satellite navigation receiver is used to initialize at least one value selected from the group consisting of the first floating ambiguity value and the second floating ambiguity value.

32. (Previously presented) The computer readable medium of claim 23, wherein the floating ambiguity values comprise integers.